

Application No. 10/714,447
Amendment Dated June 17, 2005
Reply to Office Action of March 22, 2005

Remarks

No amendment is made in this response to the Final Rejection. Claim 19 is pending.

In the Office Action, claim 19 was rejected under 35 U.S.C. § 103 (a) in view of Chang (PCT Publication WO93/15062 or U.S. Pat. No. 5,658,908, applied as of its § 102(e) date). Applicant respectfully traverses the rejection for the following reasons.

In supporting the rejection, the Examiner averred in the Office Action:

...[T]he primary references are obvious variants of that newly presented herein since the differences [between] allyl v. instant R1 as H, alkyl, arakyl, etc are taught as interchangeable as well as methyl and hydrogen on piperazino carbons in similar compounds having the same use as described by Chang references... Note that instant compounds are within the preferred embodiments taught in col.6...

Applicants respectfully submit that many unobvious differences in view of the Chang reference were overlooked and the rejection should be withdrawn for the following reasons.

First of all, the compounds of the instant claim 19 are not within the preferred embodiments taught in col. 6 of Chang. The preferred compounds (col. 6 of U.S. Pat. No. 5,658,908) of Chang relied upon by the Examiner requires at least one of R3, R4 and R5 to be methyl (see lines 54-55, col. 6). In contrast, formula I of the instant claim 19 does not contain any methyl on the piperazino ring. As a result, compounds of claim 19 are not within the preferred embodiment taught in col. 6 of Chang. In addition, the fact that the preferred embodiment of Chang requires at least one of R3, R4 and R5 to be methyl actually teaches away from the instant claim 19, because an ordinary skilled person in the arts reading Chang would expect the at least methyl group on the piperazino group is an important feature of Chang and would not be motivated to remove the methyl group. Therefore, the instant claim 19 is not obvious in view of Chang for this reason alone.

Secondly, Y group of the preferred compounds of Chang (lines 26-33, col. 6) relied upon by the Examiner is in a *meta* position of the phenyl, to which it is attached. In contrast, claim 19 requires the corresponding substituent on the phenyl ring in a *para* position. Therefore, the instant claim 19 is not obvious in view of Chang for this additional reason.

Thirdly, the compounds of Chang have a different use from the compounds of the instant claim 19. "The compounds of the [Chang] invention include benzhyrlyl piperazine compounds useful as mu and/or delta receptor opioid compounds..." See col. 1, lines 12-14 of Chang. In

Application No. 10/714,447
Amendment Dated June 17, 2005
Reply to Office Action of March 22, 2005

contrast, the compounds of the instant claim 19 are selective delta agonists with minimal affinity towards the mu receptors. See page 2, lines 5-7 of the instant specification. Therefore, Chang actually teaches away from the instant claim 19, because an ordinary skilled person reading Chang would have expected the compounds of the instant claim 19 to be a delta and/or mu receptor agonist. The ordinary skilled person would not expect the compound of the instant claim 19 to be a selective delta receptor agonist in view of Chang. Therefore, not only there is no motivation to modify the teaching of Chang to arrive at the instant claim 19, but also there is no expectation of success for these proposed modifications. Therefore, the instant claim 19 is not obvious in view of Chang for this additional reason.

In conclusion, the Examiner did not meet the burden of setting forth a *prima facie* obviousness rejection and withdrawal of the rejection is respectfully requested.

Applicants believe the application is in condition for allowance, which action is respectfully requested.

Although Applicants believe no fees are due, the Commissioner is hereby authorized to charge any deficiency in the fees or credit any overpayment to deposit account No. 26-0166, referencing Attorney Docket No. A1479-3P US.

Respectfully submitted,



Date: June 17, 2005

George Gilbert for Jianzhong Shen
Name: George Gilbert
Reg. No. 35,881
Phone No.: 302-886-3887
Name: Jianzhong Shen
Reg. No.: 48,076
Phone No.: 302-886-8854
Global Intellectual Property, Patents,
AstraZeneca,
1800 Concord Pike,
Wilmington,
DE-19850-5437

Enclosures: Transmittal Form